Welcome

I am delighted you are considering joining us in the Department of Management Science. We have a worldwide reputation for our excellence in Business Analytics, Operational Research, Information Systems and Operations Management. That status is built from first-year students to our most experienced professors.

Our courses are perfect for those who have excelled at Mathematics or Statistics at school, and those with a thirst for knowledge and understanding about how things work in business – and why they work that way. We will provide you with in-demand skills that will allow you to solve real-world problems in business and industry.

Our diverse international student body carry their Lancaster experience with them throughout their careers. Our degrees are ideal preparation for careers in general management or consultancy, as well as for more specialist roles in industry, finance, the public sector or government. Our graduates have gone on to work for companies such as United Utilities, PwC and Deloitte.

Our researchers have a distinguished history of helping organisations solve real problems. You learn from internationally-renowned scholars with knowledge in areas including Transport and Logistics; Marketing Analytics and Forecasting; Supply Chain Management; Optimisation for organisations such as hospitals; and Information Systems. Lancaster University Management School is rated the number one business school in the UK for both our research power and research environment, and you feel the benefit of this in the classroom.*

Our courses are designed to be flexible. You can focus on your interests and broaden your knowledge to put you in a better position to achieve your career ambitions. Our excellent careers teams can also help prepare you for interviews and assessment centres, build your CV and make you attractive to potential employees.

Whichever degree you are interested in, you will graduate with lifelong memories and skills.

Thank you for considering study at Lancaster as you make this important decision for your future life and career.

Professor Linda Hendry
Head of the Department of Management Science

*REF 2021, Business and Management Studies, first for Research Power, equal-first for research environment.

Apply data science and analytics to modern business problems

Organisations rely on sophisticated analysis and technology to perform effectively, and we produce creative, technically competent and skilled graduates who can deliver the required skills – and more.

BSc Business Analytics is an academically rigorous programme that teaches the core skills of applying data science and analytics to modern business problems. If you are numerate, analytically minded and have an unquenchable curiosity about how and why things are done the way they are, Business Analytics can help launch your career in industry, finance, the public sector, government or consulting.

Brenda Wibisono
Lancaster University not only provided me with a Business Analytics degree, but also filled my life with very precious moments and unforgettable lessons.
How your degree is structured

Your degree is made up of two main parts: the first year, which is referred to as Part I and the second and third year, which are called Part II. If you are taking a four-year degree the fourth year is still within Part II.

You will study a range of modules in each Part. Some are taken by all students on your degree programme, some are optional modules focused on your major subject area, and some could be options from outside of your major subject area.

This structure offers you the chance to devise a more flexible degree programme that reflects your interests.

What you’ll study

We will show you how analysing data can help solve real-life problems. We’ll also demonstrate what it means to think statistically as you learn techniques and approaches that help organisations plan and improve decision-making processes.

You’ll use programming tools such as Python and R, spreadsheets and business intelligence software, gaining important skills which can be used to bring intelligence to industry.

We will teach you how to make forecasts and use data to understand complex behaviour, and introduce you to operational and strategic business contexts, applying your skills on a team project for a client in the Lancaster area.

In your second and third years, you will study project management modules that act as a core to help put ideas into practice, gain employee support during organisational change initiatives, and improve your consultancy skills.

You can also choose modules for a specialist track. The Business Analytics track delivers the mathematical tools to understand complex behaviour, and introduce you to business analytics and business data science.

The Operations, Logistics and Supply Chain Management track explores the problems faced by operations managers. It covers topics such as purchasing, inventory planning and risk analysis. For students who want to learn more about designing and managing the computer-based systems of our digital economy, the Information Systems specialism is for you.

For more information, please visit lancaster.ac.uk/study

Optional module example:

Supply Chain Management
Examine the principles and practices of supply chain management, building on operations management concepts. Explore supply chain and logistics management applications in various sectors, such as retailing, pharmaceuticals, information technology, and higher education.

Most of the time will be spent considering inter-organisational relationships from various perspectives, but it will also be necessary to understand how they relate to matters within the organisation, including functional areas such as logistics and procurement. As well as covering core principles and practices, you’ll consider emerging supply chain themes such as service supply chains and sustainability.

Business Modelling and Simulation
Apply the project lifecycle framework, associated consulting and business analytics tools and techniques, and people and presentation skills, as you define and manage a real-world project.

Business Analytics Project
Using the Crossbay Contracting Game, a management game designed by the module convenor and his colleagues at HCS Ltd, you’ll reach an agreement that is satisfactory to three parties.

Advanced Spreadsheet Modelling
Skills and knowledge recruiters want to see: spreadsheet modelling, problem structuring, statistics, and project management.

Structuring Complex Problems
Issues and problems in the complex world of management do not necessarily arise in a well-structured form. People often do not know what they want or what is possible. They may also disagree about what they are trying to achieve and the means for arriving at their goals. Much thinking needs to be done in order to define an appropriate framework within which a useful analysis or project can be carried out.

Various approaches have been developed in recent years to assist in this task, often referred to as problem-structuring methods (PSMs). These very practically oriented methodologies typically involve the management team to help facilitate the structuring of complex situations. They place emphasis on dialogue to think through strategic problems, identify the salient issues, formulate goals and negotiate action plans. This module introduces you to several PSMs and some of the process skills needed to use them.

[Table of modules for each year]

Year 1 Core Modules
Introduction to Business Intelligence and Analytics
Covers the introductory topics of business intelligence, business analytics and business data science.

Year 2 Core Modules
Business Forecasting
Techniques for forecasting future customer demand, including a range of predictive models. Develop your knowledge of the best forecasting in problem situations.

Optimisation
This module describes a variety of optimisation algorithms and how business problems can be modelled using these techniques.

Year 3 Core Modules
Business Analytics Project
Apply the project lifecycle framework, associated consulting and business analytics tools and techniques, and people and presentation skills, as you define and manage a real-world project.

Year 2 Optional Modules
Business Modelling and Simulation
IT in Organisations: Introduction to ERPs
Managing Business Information Systems
Supply Chain Management

Year 3 Optional Modules
Advanced Spreadsheet Modelling
Business Modelling and Simulation
Data Mining for Direct Marketing and Finance
Developing Business Information Systems
Managing Business Information Systems
Optimisation
Structuring Complex Problems
Supply Chain Management
Entry requirements

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<tr>
<th>A Level</th>
<th>GCSE</th>
<th>IELTS</th>
<th>International Baccalaureate</th>
<th>BTEC</th>
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<td>ABB</td>
<td>Math grade B or 6, English grade C or 4</td>
<td>6.5 overall with at least 5.5 in each component</td>
<td>32 points overall with 16 points from the best 3 Higher Level subjects</td>
<td>Distinction, Distinction, Merit</td>
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We welcome applications from students with a range of alternative UK or international qualifications. Find out more here: lancaster.ac.uk/study/undergraduate/how-to-apply

Typical contact hours
10 to 15 per week.

Typical assessment
Module assessment includes a mixture of coursework and exams. Weighting varies by module.

Industry and study abroad options
This degree has options to spend a year on placement or study overseas for a portion of your degree. Entry requirements for this degree variation may differ. Please check the website. For more information, please visit lancaster.ac.uk/study

Life at Lancaster

Where future leaders are made
LUMS is a place of collaboration and creativity. It’s a place where ideas are exchanged, talent is nurtured and bright futures begin. You will be part of a diverse student community that benefits from world-class facilities and a supportive learning environment.

Our brand new five-storey Management School building is a space to think and collaborate with three new lecture theatres, two executive teaching suites and a large atrium. This cutting edge facility provides an inspiring setting for the whole community, with large open spaces designed to enhance collaboration.

We are also home to a diverse, thriving and international community with a network of over 40,000 alumni.

Nine colleges, one home
Colleges are central to your University experience. They are where your social journey will start and one of them is very likely to be your home in Year 1. They’re where you can study and socialise and it’s almost like stepping into a ready-made set of friends. For ‘collegiate’ read ‘supportive’, ‘friendly’, ‘fun’ and ‘open’.

Future career options
- Business analyst
- Quantitative analyst
- Operations research analyst
- Market researcher

Business Analytics is one of the most important areas of modern business as the volume of data both created and employed increases. Depending on your chosen pathway, Business Analytics at Lancaster will equip you to manage and interrogate data, be that in operations or logistics and supply chain management. The skills you gain from your degree are highly sought after.

Our graduates work for large and small companies around the world, in a variety of roles.

LUMS has an award-winning careers team who provide you with a dedicated careers and placement service. We also attract a wide range of leading global employers to campus offering you the opportunity to interact with graduate recruiters from day one of your degree.

You’ll not only gain a highly reputable degree, you’ll also graduate with life- and work-based skills. Every student is eligible to participate in The Lancaster Award, which offers you the opportunity to complete key activities such as work experience, employability awareness, career and social development.

Andris Bogomols
I believe that this course prepares you and helps you move into the professional world. It had loads of statistics, analytics that are in high demand amongst potential employers, it also allowed me to grow personally by developing my soft skills.
How to apply

All the up-to-date information you need before you submit your application is online:

lancaster.ac.uk/study

Get in touch

E: lums@lancaster.ac.uk

lancaster.ac.uk/asklums

The information in this leaflet relates to 2023 entry to the University and every effort has been taken to ensure the information is correct at the time of publication (June 2022). The University will use all reasonable effort to deliver the course as described but reserves the right to make changes after publication.

Further legal information may be found at:

www.lancaster.ac.uk/compliance/legalnotice.